

AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 3 and 4 and cancel claim 2 as set forth below. The claim listing below replaces all prior versions of the claims in the application.

1. (Currently Amended) A liquid discriminating apparatus comprising:

a concentration detecting device that ~~detects~~ calculates a concentration of a liquid reducing agent based on heat transfer characteristics between two positions spaced apart from each other[[,]] in a storage tank that stores a liquid supplied to a nitrogen oxide reduction catalytic converter disposed in an engine exhaust system; and

a control unit ~~which~~ that counts up a frequency at which the concentration calculated by said concentration detecting device becomes equal to or less than 0% and discriminates a type of the liquid in said storage tank,

wherein said control unit discriminates that the liquid in said storage tank is water, ~~or that the liquid in said storage tank is a liquid reducing agent, or that said storage tank is empty,~~ when the counted frequency is greater than or equal to a predetermined frequency greater than 1 ~~concentration detected by said concentration detecting device is equal to or less than 0%, or~~ discriminates that the liquid in said storage tank is the liquid reducing agent when the concentration calculated by said concentration detecting device is more than 0% and also equal to or less than the a predetermined concentration, or and discriminates that said storage tank is empty when the concentration calculated by said concentration detecting device is more than the predetermined concentration, respectively.

2. (Canceled)

3. (Currently Amended) The apparatus according to claim 1 ~~or claim 2, wherein further~~ comprising a display device that visibly displays the discrimination result by of said control unit ~~is disposed.~~

4. (Currently Amended) A liquid discriminating method, comprising:
calculating a concentration of a liquid reducing agent based on heat transfer
characteristics between two positions spaced apart from each other wherein in a storage tank that
stores ~~the~~ a liquid supplied to a nitrogen oxide reduction catalytic converter disposed in an
engine exhaust system, ~~the concentration of a liquid reducing agent is detected based on heat~~
~~transfer characteristics between two positions spaced apart from each other;~~
counting up a frequency at which the calculated concentration becomes equal to or less
than 0%;

~~and it is discriminated~~ discriminating that the liquid in said storage tank is water when the
counted frequency is greater than or equal to a predetermined frequency greater than 1;

discriminating, or that the liquid in said storage tank is the liquid reducing agent when the
calculated, that said storage tank is empty, when the detected concentration is equal to or less
than 0%, more than 0% and also equal to or less than the a predetermined concentration; and

discriminating that said storage tank is empty when the calculated concentration is, or
more than the predetermined concentration, ~~respectively.~~